

Appl. No. 10/797,885
Amtd. dated January 4, 2006
Reply to Office action of October 4, 2005

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-5 and 11-15 (withdrawn)

Claim 6 (currently amended): A check valve adapted for delayed gas pressure release, which comprises:

a body with a proximal supply end and a distal power end;
a female-threaded supply end receiver open at said supply end;
a female-threaded power end receiver open at said power end;
a passage extending between and selectively communicating said receivers;
a seat located between said passage and said supply end receiver and including a discharge port;
said passage having a female-threaded set screw receiver adjacent to said power end receiver and a ball chamber located between said set screw receiver and said supply end receiver;
said ball chamber having a cross-sectional configuration with a central core and multiple, radially spaced, channels each extending longitudinally from said set screw receiver to said seat and having radiused channel sides adjacent to said core and a radiused channel outermost portion, said ball chamber having supply and power ends;
a ball movably position within said passage central core between a closed position engaging said seat in sealing relation and substantially closing said passage at said seat and an open position disengaged from said seat and substantially opening said passage;

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a return spring located entirely in said [passage] ball chamber and engaging said ball, said spring biasing said ball towards its closed position; [and]

a bypass extending between and communicating said supply receiver and said [passage] ball chamber, said bypass being adapted to dissipate gas through said valve with said ball in its closed position and said bypass being aligned with a respective said channel;

a male-threaded set screw threadably received in said set screw receiver and having a center opening extending between and communicating said power end and said ball chamber:

said return spring including opposite ends respectively engaging said set screw and said ball;

said seat being located at the supply end of said ball chamber adjacent to said supply end receivers for substantially closing the supply end receiver with said ball in its closed position whereby a substantial seal is formed with said seat at a location distally space from said set screw; and

said return spring continuously maintaining said ball in spaced relation from said seal for unimpeded flow at maximum flow rates through said valve.

Claim 7 (cancelled)

Claim 8 (original): The check valve according to claim 6, which includes:

a male supply coupling adapted for connection to a compressed gas source and threadably received in said supply end receiver.

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Claim 9 (original): The check valve according to claim 8, which includes:

a male power hose coupling adapted for connection to an air hose and threadably received
in said power end receiver.

Claim 10 (original): The check valve according to claim 9, which includes:

a pair of sealing washers located between said body supply end and said male supply
coupling and between said body power end and said male power hose coupling
respectively.

Claims 11-15 (withdrawn)